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Policy and Procedures for Intergovernmental Personnel Assignments

Los Alamos National Laboratory

Environmental Science and Technology Program Office

I. Introduction

- A. Background. Interagency Personnel Assignments (IPAs) are of growing strategic importance to the Science and Technology (S&T) Program Office of the Environmental Science and Waste Technology (E) Division. IPAs are a means for better serving customers and for more effectively developing programs and capabilities at the Los Alamos National Laboratory (LANL). This document describes the IPA policy and procedures to be used by the E-ST Program Office for all IPA assignments in its program area. The policy and procedures described here should be considered subject to change. Also, LANL and DOE IPA policy and procedure take precedence over this policy in the event of discrepancies (please see: http://www.hr.lanl.gov/hrstaffing/StaffingPrograms/professionalleave.stm)
- **B. Key Features**:. DOE/EM/OST recognizes several key features are necessary for any science and technology program to achieve successful demonstrations and deployments. First, the technology development program must be driven by the needs of the operations end-users. Second, the program must have an accountability system that ensures funded projects support site needs and are validated by the end-users. Third, the program must provide a technology life-cycle continuum (LCC) that effectively spans from basic research to technology development, through demonstration, and finally to deployment. The LCC process should be an essential component of the DOE/EM process for S&T if a cohesive and comprehensive cleanup strategy is to be realized.
- **C. Opportunities**. LANL has been offered the opportunity of placing one or more people in Washington, DC, in the DOE/EM Office of Science and Technology (OST). These would be LANL employees placed in DOE under the aegis of an IPA. This document describes some of the job duties, personnel requirements, and selection process for LANL employees.

II. IPA Duties and Responsibilities in DOE/EM/OST

- Demonstrated ability to recognize program development potential of new approaches including match to site-specific needs, regulatory impediments, etc.
- Subject matter expert in one or more areas of interest to DOE/EM/OST
- Demonstrated writing and presentation skills

III. IPA Responsibilities to LANL

This must be accomplished without violating the Conflict-of-Interest requirements for an IPA.

- Ability to recognize the S&T potential for new programs/projects for LANL
- Regular communication with the E-ST Program Office

IV. IPA Required Skills

- Demonstrated high-quality science and technology reputation both within and external to LANL
- Recognized nationally (and internationally) as a leader of one or more (preferably more) technical areas/initiatives of interest to DOE/EM/OST; this includes knowledge and experience
- Demonstrated technical leadership and project management skills.
- Demonstrated experience in program development, advocacy, and strategic planning.
- Broad knowledge of science and technology that can be utilized to evaluate S&T opportunities, gaps, directions, etc.
- Demonstrated experience and knowledge of Laboratory, DOE Complex, university, and industry capabilities.
- A record of effective communication, teamwork, and consensus building, particularly under schedule and programmatic pressure.
- Broad knowledge of Laboratory and DOE programs, capabilities, and goals, particularly DOE/EM/OST and the EM operations projects.

- Ability to meet Conflict-of-Interest requirements.
- Demonstrated ability to develop effective science and technology projects/directions across the Laboratory, the DOE, and generally throughout the science, technology, and operations community.
- Demonstrated ability to work on a team, either as the leader or as a team member
- Demonstrated high-degree of personal integrity as much of the information being used will be of a sensitive nature
- Demonstrated reliability since the DOE/EM/OST members will rely on the IPAs ability to perform

V. IPA Descired Requirements

- Q clearance
- Broad knowledge of Laboratory and programs, capabilities, and goals.
- Significant publication record

VI. Program Initiatives of Joint Interest to DOE/EM/OST and LANL

A. National-scope-initiatives Where LANL Could Take a Lead Role

- <u>Linkage between DOE/EM, DOE/DP, and DOE/NNSA:</u> Given the budget and political drivers within DOE, it would make sense to minimize the duplication of efforts between EM, DP and NNSA in the area of S&T by having DOE/EM/OST be the central organization. This would help reduce the mission vulnerabilities of DP and NNSA. LANL could be the Lead Laboratory since we are so actively involved in all three (3) offices. Linkage between these three programs in the area of Nuclear Materials (and the LANL lead laboratory role for both DNFSB 94-1 and the Nuclear Materials Focus Area) is particularly relevant.
- <u>Linkage between DOE/EM/OSTand DoD:</u> Similar to the linkage and rationale defined for a linkage between EM, DP, and NNSA is the need for better linking with the Department of Defense (DoD). The types of DoD problems to be addressed are similar between the two federal agencies. Again, LANL could be the Lead Laboratory since we are so actively involved DoD programs.

- Modeling and Simulation: Modeling and Simulation (M&S) is a key component in bring to closure the cleanup activities be they in waste management or environmental; restoration. Without a DOE-specific effort in this area, stakeholder and regulatory acceptance will be difficult, decision making will not be defensible, performance and risk assessment will be inadequate, and the general program effort will be less than satisfactory. LANL conducted a major workshop on this subject for DOE/EM/OST some years ago and is in a position to lead/coordinate such an effort. M&S should be a major component of Long-Term Stewardship since it allows for prediction of consequences under various scenarios.
- Pollution Prevention: Particularly for DOE/DP and DOE/EM, the future of EM activities will
 be to not generate the environmental problems in the first place. However, to do this without
 sacrificing mission-critical capabilities and experience requires a careful program. With
 LANL's significant role in such activities, we could lead such an effort. New technologies
 could help meet the DOE 2005 waste minimization goals.
- Regulatory Rationalization: A significant fraction of the federal and state regulations are not technically defensible or are in conflict with each other. DOE/EM/OST is in a position to take a critical look at the regulation and to propose changes to put them on a consistent basis based upon technical understanding. A part of this effort would be directed at streamlining the existing regulatory requirements. However, a significant portion of the effort may need to be directed at the multiple layers of increasingly conservative interpretations of the regulations. These lower tier requirements, imposed internally, may need to be rationalized to fully identify where the regulations themselves must be streamlined. With LANL's significant role in such activities, we could lead such an effort, particularly with respect to keeping the "pipeline" to WIPP full. DOE could save millions if they had a team to interpret regulations and have a "regulatory pushback" team. There are examples at LANL where fear of noncompliance has led to increased operational costs. With LANL's significant role in such activities, we could pilot such an effort.
- <u>Non-Destructive Analysis (NDA)</u>: NDA for efficient, cost effective characterization of large volumes of TRU waste for shipment to WIPP or for mixed low-level waste elsewhere. An area receiving increased attention is the characterization of remote-handled (RH) waste.
- Actinide Chemistry: Actinide chemistry is a essential component of the EM cleanup
 mission, directly resulting from the defense activities at LANL. As LANL has responsibility
 for the only remaining operating plutonium facility in the DOE Complex, we have the
 responsibility to ensure that nuclear materials are safely handled, disposed, or stored, and that
 the future impact of such operations on the environment is minimal.

B. Science and Technology Projects of Potential Interest to LANL

- Pantex Aquifer Cleanup: The recent observation that the Ogalalla Aquifer is being contaminated by TCE, high explosives, and other materials has lead to the need for rapid assessment of true sources of the contamination, charaterization and modeling of the Pantex site, assessment of the most viable prevention and remediation methods, and implementation of optimum solutions. Resolution of the Pantex problem(s) has applicability to others in the DOE Complex (including: LANL, RFETS, INEEL, SPRU, Hanford ...) and DoD.
- <u>Volume Reduction:</u> Methods that reduce the volumes of contaminated soils being removed from Material Disposal Areas (MDA)
- <u>Tritium Decontamination Technologies</u>: Rad Liquid Waste Facility compliance with NPDES, etc.; D&D of Tritium Systems Test Assembly (TSTA) over the next two years.
- Orphan Wastes: Methods for dealing with waste that have no path-to-closure
- <u>Increased Packing density of TRU Waste:</u> Improvement in the packing density of TRU waste being sent to WIPP, especially the hydrogen generation issue and the oversized objects issue.
- <u>Final Disposition of Special Nuclear Materials</u>: For many materials, the technical basis must be defined before an adequate disposition path can be developed.
- <u>Technical Assistance</u>: Since LANL has the greatest DOE expertise in SNM, it should be used as a resource to DOE for decisions on disposition of SNM across the DOE Complex..

VII. Re-entry into LANL

The LANL policy for return of externally located personnel (I.e., IPAs) does not guarantee the return of such personnel into the same or similar positions with the Laboratory. Consequently, a plan must be developed and approved for such a "re-entry." This plan must include the following:

- Benefit to employee: How the PA will benefit the candidate
- <u>Benefit to LANL</u>: How the information/knowledge/experience will benefit the Laboratory
- Rentry Organization: Where the candidate expects to reside upon return to LANL

- <u>Benefit to re-entry organization</u>: How the information/knowledge/experience will benefit the re-entry organization
- <u>Approvals</u>: Written approvals of Group Leader of re-entry group and Division Leader of re-entry Division

VIII. Candidate Selection Process

The following must be delivered to the E-ST Program Office"

- 1. Each potential IPA candidate shall get written approval for being considered for an IPA from their Group Leader and Division Leader. Each potential IPA candidate shall prepare the 'rentry' plan as described above.
- 2. Each potential IPA candidate shall prepare a detailed resume that emphasizes relevant experience, knowledge, reputation, and collaboration ability
- 3. Each potential IPA candidate shall prepare a document that describes his/her capabilities, experience, etc. that meet the requirements in this document (Sections II through VI).

After assuring that the candidates background is relevant to DOE/EM/OST, the names and documentation of candidates that best meet the needs of DOE/EM/OST will be submitted to DOE/EM/OST by E-ST for their consideration and selection.